FISEVIER

Contents lists available at ScienceDirect

# Social Science & Medicine

journal homepage: www.elsevier.com/locate/socscimed



# Re-imagining *miyo-wicehtowin*: Human-nature relations, land-making, and wellness among Indigenous youth in a Canadian urban context



Andrew R. Hatala<sup>a,\*</sup>, Darrien Morton<sup>a</sup>, Chinyere Njeze<sup>a</sup>, Kelley Bird-Naytowhow<sup>a</sup>, Tamara Pearl<sup>b</sup>

- <sup>a</sup> Department of Community Health Sciences, Max Rady College of Medicine, University of Manitoba, Canada
- <sup>b</sup> Wiyasiwewin Mikiwahp Native Law Centre, College of Law, University of Saskatchewan, Canada

#### ARTICLE INFO

Keywords:
Indigenous youth
Land
Meaning-making
Environmental repossession
Agency
Resilience
Saskatchewan
Community-based research

#### ABSTRACT

Relationships to land and nature have long been recognized globally as a central Indigenous determinant of health. As more Indigenous peoples migrate to larger urban centers, it is crucial to better understand how these relationships are maintained or function within urban spaces. This article outlines the results of a year-long collaborative study that qualitatively explored Indigenous young peoples' connections between "land," nature, and wellness in an urban Canadian context. Thirty-eight semi-structured interviews were conducted with 28 Cree and Métis Indigenous youth living within Saskatoon, Saskatchewan. A strength based analysis focused on re-imagining miyo-wicehtowin; that is, the processes of youths' self-determination and agency that build positive human-nature relationships and enact "land-making" amidst their urban spaces. This research critically engages environmental dispossession and repossession to more readily consider decolonizing land-based approaches to health and wellness among urban contexts. Future empirical and methodological directions for exploring human-nature relationships in urban health research are also offered.

#### 1. Introduction

*Miyo-wicehtowin* is a Cree word meaning 'having or possessing good relations.' ... It asks, directs, admonishes, or requires Cree peoples as individuals and as a nation to conduct themselves in a manner such that they create positive or good relations in all relationships (Cardinal and Hildebrandt, 2000, p. 14).

A central feature of the Cree Indigenous philosophy and concept of *miyo-wicehtowin* today involves human-nature relationships with the "land" and the environment or "Mother Earth" more broadly. Despite widespread recognition of land, nature, and environment as fundamental Indigenous determinants of health globally (King et al., 2009), as well as a rich history of literature demonstrating the importance of "land" and "nature" for supporting the health and wellness of Indigenous young people (e.g. Big-Canoe and Richmond, 2014; Brown et al., 2012; Iwasaki and Bartlett, 2006; Kirmayer et al., 2009; Richmond and Ross, 2009; Ritchie et al., 2015; Wexler, 2006), limited research demonstrates how conceptions of "land" and human-nature relations are constructed, maintained, and function within urban contexts. This conceptual omission appears to be predicated on the dichotomous assumptions that land-based activities happen "out there" or

"on the land" in rural areas, and do not belong "here" in the city. These notions of land, place, and nature, however, are not reflective of the contemporary resurgence of Indigenous grassroots organizing and decolonizing efforts in Canadian metropolitan areas that seek to re-cover, re-make, and re-turn land-based practices and relationships to urban spaces for healing, belonging, and thriving (Kino-nda-niimi Collective, 2014; Simpson and Coulthard, 2014).

The research presented here focuses on how urban Indigenous youth negotiate and construct a contemporary sense of themselves as being-in-relation to land and nature within urban contexts through creative interchanges of traditional, contemporary, and adopted cultural practices. Such everyday acts of self-determination and agency foreground urban place-making and meaning-making processes that reconstruct relationships to "land" in urban contexts and young peoples' perceived connections to health and wellness. Through the stories and experiences of contemporary youth living within urban spaces, we thereby make an empirical and methodological case for re-imagining *miyo-wicehtowin* by describing human-nature relations implicated in processes of urban "land-making." In so doing we argue that the uptake of culturally grounded land-based approaches to health and wellness among Indigenous communities, as important as they are, should not only focus on rural spaces, but broaden and strengthen the development of

<sup>\*</sup> Corresponding author. Department of Community Health Sciences, Max Rady College of Medicine, University of Manitoba, Room S108J Medical Services Bldg, 750 Bannatyne Avenue, Winnipeg, Manitoba, R3E 0W3, Canada.

land-based approaches within urban contexts. This research therefore contributes to a growing body of literature examining relationships with the land and nature to promote health, wellness, and resilience among Indigenous youth.

#### 1.1. Urbanization and colonization in Canada

The United Nations (2014) reported that more than half the world's population live in urban areas with projections estimating 66 percent by 2050. Reflecting other global trends, Indigenous peoples are enduring migratory processes of increasing urbanization (King et al., 2009; Stephens, 2015; United Nations, 2010). In Canada, over half of the 1.4 million First Nations, Inuit, and Métis Indigenous Peoples reside in urban areas located away from home communities, reservations, and ancestral homelands (Siggner and Costa, 2005). Indigenous Peoples across Canada share similar characteristics to explain the multifaceted processes influencing urbanization, including: historical and contemporary colonization; forced displacement and land dispossession; geographic extension of kinships ties; a shift from land-based to marketbased economies emerging in cities; and increased access to health, social, and commercial services otherwise unavailable in rural home communities (Peters and Andersen, 2013). These complex and dynamic processes of urbanization significantly impact the health and wellness of individuals, families, and communities, both positively and negatively (Senese and Wilson, 2013; Wilson and Cardwell, 2012).

While reasons for migration are motivated by varying factors and may promote opportunities and benefits, cities more often present cultural and socioeconomic hardships making it difficult for Indigenous people to adapt, especially those most vulnerable, such as women, elders, medical relocation patients, and youth (Clark and Hunt, 2011; DeVerteuil and Wilson, 2010; Lavoie et al., 2015). In Canada, urban Indigenous challenges and inequities are witnessed through heightened rates of poverty, homelessness, child apprehension, lack of social support, gang violence, incarceration, obstacles to preserving cultural identity and language, and racism and social exclusion (Browne et al., 2011; Comack et al., 2013; Environics Institute, 2010; Peters and Andersen, 2013). Additional struggles also emerge in the context of constitutional and treaty rights violations, inadequate mechanisms ensuring urban Indigenous self-governance, and cross-jurisdictional issues related to service delivery and policy (Lavoie, O'Neil, Reading and Allard, 2008)

As Indigenous Peoples progressively experience greater access to socioeconomic and cultural opportunities in cities due to sustained advocacy, inequalities are lessening, albeit very slowly (Environics Institute, 2010). This shift is occurring at a rate unsupportive of a growing young adult population of working age. Indigenous youth in Canada under 24 years account for approximately half the total Indigenous population, which is substantially higher compared to the non-Indigenous average (Statistics Canada, 2016). Thus, public health and social costs are estimated to increase with a growing Indigenous population and the necessity to address complex needs (Lavoie and Forget, 2008). Targeting the social determinants of health and developing upstream public health interventions – including access to and connections with the "land" – have been championed as a solution to address the socioeconomic and health inequalities Indigenous communities too often experience (Greenwood et al., 2015).

# 1.2. Land and nature as determinants of health

First Nations, Inuit and Métis broadly conceive of health and wellness as wholistic concepts that move beyond biomedical models to manage disease. This view promotes balance in all aspects of life including physical, mental, emotional, and spiritual dimensions (Adelson, 2005). Wellness models here extend beyond the individual to include balance and inter-relationships among families, communities, land, nations, and ancestral ties connecting past, present, and future

generations (Greenwood et al., 2015). Studies exploring Canadian Indigenous youth perspectives consistently find that they broadly conceptualize health and wellness to include social determinants (Blanchet-Cohen et al., 2011). Among those wider social determinants of health, access to land and stewardship over land are often understood as central to the wellness of Indigenous individuals and communities directly through bodily, cognitive, and spiritual impacts, as well as indirectly through control over services and policy change (Big-Canoe and Richmond, 2014; Richmond and Ross, 2009; Wilson and Peters, 2005).

Following a critical population health perspective within Indigenous health contexts, an emphasis on "land" has emerged as central for several reasons. The primary methodological and theoretical goals here involve centring place-based notions of wellness that necessitate a cultural and environmental specificity emphasizing history and geography (De Leeuw and Greenwood, 2015; Panelli and Tipa, 2007; Richmond and Ross, 2009; Wilson, 2003; Wilson and Peters, 2005). By centring notions of place within health research, these goals support various actors engaged in decolonization processes to recover land in settler-colonial nation-states such as Canada (Tuck and Yang, 2012). They also seek to interrogate and reveal power inequities underlying the social determinants of health broadly, but more importantly, how the distribution of determinants can be transformed to improve health status (Brown et al., 2012).

Within the literature on land as a determinant of health, two positions generally emerge. From an environmental dispossession perspective, social, cultural, and political processes through which Indigenous peoples become unfairly and systematically disconnected from their ancestral homelands are described and analyzed (Richmond and Ross, 2009). Studies show how Indigenous health inequities can be traced to historical processes of individual and collective dispossession originating from forced relocation, natural resource extraction, and changing environments (Durkalec et al., 2015; Jackson, 2011; Richmond et al., 2005). An environmental repossession perspective reframes the potentially pathologizing and deficit-based approach associated with illness and victimhood (Hatala et al., 2016), and involves the social, cultural, and political processes through which Indigenous peoples are re-covering ancestral homelands and re-vitalizing cultural Indigenous lifeways to improve health and wellness outcomes (Big-Canoe and Richmond, 2014). This perspective can also involve everyday acts of decolonization efforts from protecting traditional lands and places to hunt or fish, to creating spaces to gather for feasts, ceremonies, smudge walks, or political land claims and water protection movements (Simpson and Coulthard, 2014). This strength-based shift grants young people agency to resist dispossession, and centers the recovery of Indigenous knowledges that are not predicated on Eurocentric notions of resource-driven economic growth, but on Indigenous worldviews endorsing sustainable human-nature relationships and land-based connections (Clark, 2018; Tobias, 2015).

# 1.3. Towards urban "land-making"

Previous research in these areas, however, continues to narrowly operationalize Indigenous Peoples' connections to "land" and "nature" by naturalizing singular rural home communities while largely negating urban spaces as potential sources of health and wellness. With minor exceptions (Wilson and Peters, 2005), the relationships between place, land, and wellness considers *traditional* or *authentic* identities as rooted in *an-other* place, such as a reserve, ancestral territory, or homeland (Peters and Andersen, 2013). These perceptions run counter to the growing resurgence and decolonizing efforts of urban Indigenous communities that are naming cities as home communities (Environics Institute, 2010). Indeed, youth today increasingly associate a sense of *home* and belonging in urban centers of residence even, at times, before identifying with rural or remote communities (Environics Institute, 2010). These re-constructions of urban spaces as relational and *home* 

counter the reproduction of essentializing "noble savage" or "ecological Indian" discourses that romanticize Indigenous Peoples as only belonging to and thriving within the natural, traditional world "out there" (Kidman, 2015; Tasker, 2017). These perspectives also challenge notions that youth *must* maintain connections to rural homelands to maintain *true* or *authentic* Indigenous cultural identities associated with health and wellness advantages.

Adelson's (2000) reflections on re-imagining indigeneity for the James Bay Cree Nation become particularly relevant to these debates. Although Adelson's (2000) description of the "Gatherings" focus on a notion of rural land juxtaposed against a colonized urban space or "village," her insights about and examples of Cree peoples' negotiating a contemporary sense of cultural identity based on a "melding of concepts and practices" and a "conscious fusion of old and new" (p. 28) offers us a point of departure to begin *re-imagining* the relationship between place, identity, and wellness in urban contexts. As Adelson (2000) observed,

People are making their own history, hybrid as it may be; melding influences, commodities, practices and products. Furthermore, it is in this assertion of a political stance that we find the basis of local strength and empowerment. Culture is used to authenticate identity in ways that are creative and transformative (p. 28–29).

This perspective suggests we recast environmental repossession as place-making and meaning-making processes whereby people become actively engaged and entangled in shifting material and spiritual relations to "land" and "nature." They are not simply instrumental practices of displacement from or reoccupation of physical and objectively constructed spaces. Rather, connections to land become dynamic sites of meaning, struggle, spiritual inquiry, and transformation (Tuck and McKenzie, 2015). This perspective ultimately suggests attention be placed on understanding the everyday acts of decolonization, self-determination, and agency that young Indigenous people employ to reconstruct and acquire cultural authenticity, such as processes of "landmaking" and nurturing human-nature relationships within urban cityscapes.

To better understand these issues, we explore two central questions: (1) how do urban Indigenous youth engage with land and nature through urban place-making and meaning-making processes? and (2) how are connections to land in urban contexts contributing to perceived health and wellness? We interpret our findings through *miyo-wicehtowin* to reveal how youth living in cities re-imagine good relationships with "land" and "nature" in contextually situated ways.

# 2. Research framework and methods

The research presented here is part of a broader ongoing project exploring urban Indigenous youth wellness that emerged from several years of conversation, relationship building, and engagement with youth, community organizations, parents, and elders within the innercity contexts of Saskatoon, Saskatchewan (see Bird-Naytowhow et al., 2017 for more details). The need to build on the strengths that were already present within these inner-city contexts became central to these early discussions and engagements. A Community Advisory Research Committee (CARC), consisting of youth, parents, elders, and members of youth serving community-based organizations, eventually crystalized and informed the development of this research process. As guided by our elders, the research approach followed a "two-eyed seeing" framework, where Indigenous and Western "ways of knowing" (worldviews) were understood to work alongside one another (Iwama et al., 2009). Applied to our research team that was made up of both Indigenous and non-Indigenous researchers, academics and community members, this approach made space for open discussions regarding the crucial roles of both "ways of seeing," improving our overall methods and interpretive understandings of youth experiences (Bird-Naytowhow et al., 2017).

Situated within a social constructionist epistemological perspective, this qualitative research combined Indigenous Methodologies (IM) with a modified grounded theory (GT) approach for data generation, interpretation, and analysis (Charmaz, 2006; Kovach, 2009). An IM framework infuses decisions concerning the choice of methods, how methods are employed, and how the data are analyzed and interpreted with Indigenous perspectives of ontology and epistemology (Kovach, 2009). Indigenous epistemology has been described as relational, placing value on not only knowledge itself but on the relationship we share with its creation (Wilson, 2001). Relationality is also central to an Indigenous epistemology, which sees researchers as connected to subjects of research and places value on subjectivity (Koyach, 2009, 2010), Implementing this modified GT and "two-eved seeing" framework was necessary not only to create a culturally "safe space" for participating youth, but also to create space for integrating aspects of IM that might otherwise conflict with the tenets of a constructivist GT, going beyond the binaries of Indigenous-settler relations "to construct new, mutual forms of dialogue, research, theory, and action" (Kovach, 2009, p. 12).

A combination of purposeful and snowball sampling methods were used to recruit youth, self-identifying as Indigenous, through our partnerships with local youth organizations and the CARC. The focus of sampling was placed less on generalizability and sample size, and more on sample adequacy so that depth and breadth of information was achieved as determined by thematic data saturation (Charmaz, 2006). In total, 28 youth between the ages of 15 and 25 years (12 male and 16 female) who self-identified as being from nêhiyaw (Plains Cree) (n = 21) and Métis (n = 7) Indigenous cultural backgrounds participated. Through guidance from the CARC, our research team engaged the youth as co-researchers in the overall process, thereby fostering collaborative relationships and an empowering space where youth were able to choose how and what data were collected, what parts of their stories were shared, and the ways their stories were utilized to support the research objectives (Bird-Navtowhow et al., 2017). This further developed their consultation skills, competence, confidence, and their trust of the research team, all as part of the capacity building aspects of the research process more generally. All aspects of this research were approved by the University of Saskatchewan's Behavioural Research Ethics Board (#14-141) and by the local ethics upheld by the CARC.

The research was carried out in 2014 within the inner-city neighbourhoods of Saskatoon at the Community Engagement Office, a satellite centre of the University of Saskatchewan. Our project took place over the entire year and included four rounds of conversational storytelling interviews (n=38 in total). A conversational method is relational and "aligns with an Indigenous worldview that honours orality as a means of transmitting knowledge and upholds the relational" (Kovach, 2010, p. 43). All interviews were audio recorded with youth permission and later transcribed. As recommended by our CARC, the conversational interviews began by opening a "safe space" where Cree and Métis cultural ways of life or "protocols" were followed. This involved the option of smudging with sacred medicines if desired and the offering of non-commercial tobacco to youth to respect the sacredness of their stories, experiences, and knowledge (Bird-Naytowhow et al., 2017).

Qualitative data analysis followed an inductive approach, enabling the integration of the research team's knowledge (as co-creators of knowledge with the youth), and a "two-eyed seeing" framework that blended Western and Indigenous interpretations of the emerging stories (Charmaz, 2006; Iwama et al., 2009; Kovach, 2009). In accordance with a GT approach, the core themes that emerged from the first interviews (n = 28) influenced the focus of subsequent interviews. As categories and themes were generated, they were checked with the youth participants, CARC, and the research team. A second round of interviews (n = 10) was then conducted to clarify the emerging themes. Ten youth were invited to participate in a second interview based on relevant themes related to our main research questions (i.e., theoretical sampling). Techniques of GT were utilized in several stages of data analysis,

including data reduction, data display, and conclusion drawing or verification (Charmaz, 2006). Data summaries, coding, finding themes, and writing memos occurred iteratively as the data were collected. Initial themes were coded using Dedoose software Version 8.1 (2018) by the first author and checked for consistency by the other authors.

After the initial analysis and coding process, the research team began to share the results in a number of public presentations with the participating youth, CARC, and organizations collaborating in the research process. Based on feedback from the youth and CARC, generalized third person references to youth stories were preferable to artificial pseudonyms. Drafts of this article were shared with youth and CARC members prior to submission. This iterative process ensured that findings are, as much as possible, representative of the experiences of participating youth.

#### 3. Results

Exploration of the young peoples' stories revealed several insights into contemporary perceptions of and relationships with "land" and "nature" in Saskatoon, Saskatchewan. Through this analysis, we do not seek to trace sources of historical and present-day traumas youth may have experienced that motivate their encounters with land or nature in urban spaces. Nor do we draw attention to exclusionary processes that produce unequal access to nature in such contexts or the "historical traumas" associated with land dispossession or dissociation (Hatala et al., 2016). In so doing we do not intend to undermine or erase such historical processes. Rather, in following the guidance of our CARC, elders, and participating youth, we present a strength-based analysis that focuses on re-imagining *miyo-wicehtowin*, that is, how young Indigenous people build positive human-nature relationships and navigate processes of "land-making" amidst their urban cityscapes.

This analysis first re-evaluates the organization of nature, land, and human-nature relations as conceptual categories across space and time. Following this, we outline four interrelated processes of land-making through which youth build human-nature relations: hugging trees as family-making; gift-giving; story-making and land-based teachings; and soothing places for regulating emotions. The discussion then raises critical questions of empirical and methodological importance for the mobilization of environmental repossession approaches within Indigenous health contexts.

# 3.1. Contesting boundaries and re-locating place

Youth in this research re-imagine land and nature as geographically unbounded, spread out and diffused across different spaces where human activities occur. Here, nature and land are not abstract, but rather lived places that are experienced, embodied, and cultured. For the most part, youth describe concepts of nature as emerging from, on top of, and out of the spaces that land exists. In other words, they can encounter "nature" where the "land" is; a flowing river in the downtown core, a single tree on a roadside median, or a space of rolling hills, flowers, and pathways behind a suburban row of houses all become places to engage nature and be on the "land." Although a clear distinction between nature, land, and synthetic city structures or technology is often delineated, youth regularly contest rural-urban dichotomies and avoid romantic rural repertoires that re-produce wilderness fantasies of evolutionary primitiveness and ecological determinism (Brantlinger, 2003). Rather, land and nature - including natural elements such as bodies of water, air, stars, seasons, and the sky - for them move through different spaces, at once static and porous, and often across urban and rural areas. As one youth explained,

It's the same river that flows in my reserve that flows through the city here ... my own reserve land and my grandma's land is also here and it means a lot to me, because I know it. If I go down the river or I head up, where it takes me up north and it goes to my grandmother's

land, like either way, this is the road for me and I know this river, this water, and this place.

Land and the natural elements that move within it do not stop at city borders, but are described to penetrate and punctuate the cement and man-made structures of cityscapes, connecting and bridging the urban and rural divides. As another youth outlined,

For me even just walking in my backyard, it reminds me of being out on the farm in the springtime. I loved growing up on the farm, just because there's so much nature and so much of everything around you. These moments in my backyard can be like that too.

As youth interpret nature to extend everywhere and encompass everything natural, nature and the land are not conceived of as a totalizing and imposing ecological presence. Here, land-making becomes situated and relational, it is about seeing continuations with rural lived experience and embodied memory of the multiple places within which day-to-day activities emerge. Indeed, as another youth expressed,

I like going for walks. I go to a river near the University and the trails. I go crazy like that, especially when there's leaves. It just feels like you're in the bush ... It just feels like it's back home. We used to run around in the bush like that, and just chase each other, and make little bows and arrows. It just kind of brings me back home, and makes me feel good. It's like being out in the wilderness, like that even here in the city.

As a common theme in all the youth stories, connections with these kinds of urban spaces bring notions and feelings of "home" to places traditionally reserved for being "out there" in "the bush." In this way, the "land" in urban contexts reflects the "bush"—the land "out there" that is fondly recalled by the youth, but oftentimes described as difficult to access during day-to-day city life, becomes accessible, experienced, and re-imagined as "here." It is through these feelings and embodied meaning-making interactions with local urban spaces that the distance between the land "out there" and the land "here" in the city become minimized. Re-imagining rural/urban conceptual boundaries as porous and relational, therefore, can facilitate youth connections with nature and land in diverse ways within urban spaces.

#### 3.2. Hugging trees as family-making

Cajete (2000) argued that Indigenous worldview and philosophy "is not based on rational thought alone but incorporates to the fullest degree all aspects of interactions of 'human in and of nature'" (p. 64). It is from this vision that we can understand Indigenous notions of miyowicehtowin as relational presence and interdependence with the world, land, and all life forms—'all my relations'. From this perspective, the youth outlined human-nature relations that were often held together through a kind of familial love and reciprocity, where aspects of nature and the natural elements in the city spaces become familial and moral, not economic, objectified, or legalistic in nature. Part of the moral and embodied aspect of this familial relation was expressed by youth as a notion of "care"—that humans are to care for the plants and trees and in turn these aspects of nature care for humans by providing air and resources to survive and thrive. For many youth, this form of reciprocity, care, and relationality was absent in their home living environments, and so having these experiences of and connections with the land in their urban contexts fulfilled longed for experiences of "home" and "belonging" in important ways. As one youth outlined,

Seeing a tree and hugging a tree and knowing that the tree has a job to fill the air with oxygen, that's unconditional love. I love hugging a tree and looking up and recognizing that the tree loves me too. In simple ways, nature's showing me that unconditional love that wasn't shown to me through my family or through my parents, you know. I look at this tree and I'm feeling like a child because I know that the trees gonna like care for me, like I'm breathing in the air.

Even though I understand my love is displaced love, I feel that with nature too, with this tree.

Re-imagining nature as familial and kinship relations for youth often involved a "displaced" love; that is, a love that was needed or wanting from the absence of family bonds, and yet somehow experienced in subtle ways through human-nature interactions, such as giving and receiving hugs from trees. In this way, descriptions of the land and nature were often expressed with a female pronoun "she," and the names "Mother Earth" or "Mother Nature." Nature and land here became relations, as an embodied and differentiated network of feminine presence, exhibiting the capacity to sustain, care, and nurture belonging and safety. Indeed, as another youth described,

When I need a hug, I'll go and hug a tree. It makes me feel like a small kid again, because it's like, being small and hanging on to your mom's leg. I know that's not your mom, but it's kinda like that secure feeling of hanging on. That's how I feel when I hug a tree. Like I just want to hug them and feel silly and know that they take care of me.

Or as another youth expressed,

You know this river is a part of my spirit, and that it is consistent in my life. It's kinda like that's the nature showing me that unconditional love that wasn't shown to me through my family or through my parents.

The desire to feel "secure" and "silly," and like a "small kid" again is also significant as many youth expressed a truncated childhood coupled with a "parentification" and forced growing up processes due to early challenging childhood experiences (Hatala et al., 2017). While being with nature and stealing a hug even in a clandestine manner, youth catch a glimpse of childhood again, and experience the playful silliness that a secure childhood freedom can exhibit. In this way, too, land-making processes centered on constructing nature as kinship were also about love – about feeling love and intimacy oftentimes absent from a family home or relationships with parents. Land-making in these contexts, then, is about "family-making" where youth re-imagine what family, and particularly the role of mothers as a feminine presence, can become.

### 3.3. Gift giving as land-making

As a central principle within many Indigenous worldviews and philosophies, gift giving is based on a perception of the natural environment as a living entity, and that the whole world of human interactions and exchanges is constituted through an infinite web of relationships, including kinship ties with and relations to the land (Kuokkanen, 2007; Wilson and Peters, 2005). Gift giving is often practiced through a wide range of activities, from individual acts in daily life to communal feasts and ceremonies held at special occasions. Unlike classical gift theories from Mauss or Levi-Strauss that focus on modes of exchange imbued with obligations, paybacks, forced reciprocity, or other mandatory acts, gift giving within a Cree and Métis cultural framework often exceeds the material realms of both economy and exchange and is founded on spiritual principles, Indigenous knowledges, and ontologies of other-than-human bonds and ecological relationships (Bird-Naytowhow et al., 2017; Kovach, 2009; Simpson, 2011; Wilson, 2001). In other words, both the "gifts" given and received can involve spiritual qualities and attributes, like kindness, courage, or trust, and be simultaneously motivated by inter-relationships with other-than-human spiritual beings and natural phenomena.

As already outlined, the youth in this research often expressed a recognition of and appreciation for nature as a living entity which gives its "gifts" – such as oxygen – to support the life and wellness of human society. At the same time, youth also described teachings and practices of gift giving or "offerings" they performed in urban spaces that were understood to maintain, reinforce, and support, not only their personal

relationship with nature and the land, but also the interconnections and kinship with all life. As one youth explained,

And even when I'm in an urban setting, I try my hardest to find a little secret spot where I hope that no one will walk so that I can twist up some tobacco and offer it there for my prayer. I'll stuff it in grass, I'll stuff it in like a bunch of flowers, or I'll try to sprinkle it in the river and leave it, you know. I'm in Saskatoon, and the people there sometimes don't have their reserves or their sacred places to go to, but those places are sacred too. In Saskatoon, it's sacred to me. Like it's my home and I dream of this place, and I dream of protecting it. Like this place means a lot to me.

The "gift" or "offering" as expressed here is a reflection of a particular worldview and sacred value system. As youth make offerings within local urban spaces, they build relations with the land through their personal experiences pertaining to those certain urban spaces – land-making as gift giving. These are spiritual acts constructed within cities to, in a way, foster local meanings of sacred space. These gifts, then, can be understood as a practice and means by which the social order and relationality of *miyo-wicehtowin* is renewed, reinforced, and secured. As a value system, the gifts and offerings are thus an expression of sacred reciprocity with the land and nature, reflective of a form of human-nature relations built on interdependence, reciprocity, humility, and respect.

Another central idea of offering or making gifts to the land is about restoring or maintaining balance. "When something is taken," one youth explained, "something is given in return to keep the balance with nature." "Like in saying a prayer and saying thank you," another youth outlined, "then in setting down and leaving your tobacco there as an offering, that helps keep that balance." Or again as another youth expressed,

I always carry a pack of smokes around with me because that's what my mom taught me. So when my mom tells me to pray, it's always like, making an offering. "Make your food offering, feed the grandmothers," She would say. The way I understand it, when I pray, is that I need to balance that medicine wheel, you know. That balance is key. So when I'm asking for something, like in my prayer, then I need to give something in exchange. So I use the tobacco as medicine for that and put it down on the land like that. Or she [mom] tells me to go feed the grandmothers. Go make a food offering. So I would go do that too and leave an offering somewhere.

As observed here, relationships with the Creator and spiritual aspects of nature, the land, and reality are maintained by individual rituals such as offering food or tobacco. These actions or "gifts" signify an intimacy and interrelatedness with the land and nature in urban spaces that also reflects, as we have seen, kinship relations and family-type bonds (Kuokkanen, 2007). These gift-giving practices are not a romanticization of a traditional past. Rather, they are an ongoing practice of a contemporary cultural and spiritual relationship with nature. These practices then become an embodied expression of a particular world-view that reflects the respect of an intimate bond and familial tie with the "land" For youth in this research, gift-giving was part of the land-making process as well as sacred protocols, laws, or obligations around how to maintain *miyo-wicehtowin* while living within an urban context.

#### 3.4. Story-making and land-based teachings

Youth encounter and build relationships with the land and nature through reciprocal relationships holding humans and nature together through ties that enable healing, wellness, and belonging. These relationships do not simply persist over time through familial or biological connections, but spiritual and ancestral connections that transcend linear and finite conceptions of time and space. In this way, nature also becomes a guiding force or spiritual teacher that can help provide a sense of purpose and meaning in one's life. Encountering and observing

nature, therefore, can be a source of knowledge, inspiration, and guidance. This "land as a teacher" metaphor is thus not isolated to rural or remote areas, but can be accessed amidst the bustle of urban life (Cajete, 2000). Reflecting other youths' experiences one youth detailed,

When I'm out walking and see ducks by the river, little lovebird ducks, they're together and following each other, taking turns and moving sideways. When I observed them, I noticed they were swimming zig zaggy and it reminded me of a teaching that I heard that like with every person, like there is always ups and downs in life. You're never given like a set straight road. There is always going to be obstacles, ups and downs. This is like me, how I have lived. So with the ducks and the way they were swimming, the way it reminds me every time I think of ducks and think of my relationships, and how I never had healthy relationships either and that is kind of the main reason to my ups and down in life. But when I see these ducks, they are just happy little ducks living life. Doing whatever ducks do. And it helps me to keep going, to find that balance and remember the ups and downs.

Here youth interactions and relationships with nature can be a means of providing "teachings" for life, insights into the ways of living, wellness, and resilience despite obstacles that emerge on "the road." The expression "doing whatever ducks do" becomes a way to reflect the natural order of life, the "ups and downs" and to help one "keep going." Land-making here involves observational insights and reflections on the storied aspects of nature and how this relates to or informs the stories of youths' lives and experiences. Thus, land-making in these urban contexts can also be about story-making, about listening to the land-based teachings of nature and interpreting these wellness teachings in relation to one's own life.

#### 3.5. Soothing places and regulating emotions

Contemporary relationships with nature are felt and known through sensory stimuli and spiritual perception, including sight, sound, smell, taste, touch, dreams, and imagination. Sensory and embodied experiences with nature were often described as eliciting a soothing response. The meaning of nature and land-based interactions in these urban contexts was brought to life with practical embodied sentimentalities and emotional responses—nature "calms me down" or "helps me cope" being frequently expressed idioms. In general, processes of relating with nature were described to either reduce and replace negative emotional states (e.g. depression, anger, stress, sadness, disconnection, hopelessness) or enhance and compensate for positive emotional states (e.g. happiness, calm, balance, well, relaxed, motivated, clearheaded, silly). Like discussions of land-based healing and "land-as-medicine" that has transformational affect (Kirmayer et al., 2009), so too were youth expressions of nature as a soothing place coupled with transformational valence.

Soothing places where nature and land interactions could occur created a sense of distance from stressors associated with the everyday lives of the youth, such as school, work, family, friends, or various forms of alienation or marginalization. As one young person discussed, "close to downtown and the river landing is where I go when I'm stressed out or just need my alone time. The sky there is really blue and it gets lighter which makes me feel calm."

Or as another expressed, "I really like to appreciate nature and everything" because "it's really calming, and it's at night that's my favorite time to walk, there's no people and you're just alone with your thoughts and everything is so quiet" and "it's almost like you're insulated within nature."

As soothing places not only create distance from stressful environments, they also become places to practice and regulate emotions. One young person outlined how aggression influenced relationships with family members, thus attempts to manage anger by "cooling down" and preventing anger from becoming "harmful" was seen as important.

Animals, plants, water and natural sounds all function during this process of emotional regulation and support the embodied experiences of being soothed and comforted:

I have anger sometimes. Like I get mad at myself or I'm mad at someone else. I go by the river and just stand beside the edge and listen, listen to nature and birds and everything around me. It cools me down. Sometimes I take it [anger] out on my mom and them [family members]. After being by the river, I end up going back home apologizing to them.

It is the engagement with and connection to these sounds that were particularly soothing here, creating a sense of "natural envelopment," "other worldliness," or "insulation" that transformed a distressful emotional expression. Access to and relationships with nature in urban spaces therefore, at times, functioned for youth by creating an atmosphere that soothed and thereby helped to regulate potentially harmful emotions that can disrupt social connections and family bonds. Here we see the effect of land-making and human-nature relationships as a means by which *miyo-wicehtowin* can be supported in other areas of life.

# 4. Discussion

Considerable health research across settler-colonial nations has explored the relationships between land, culture, and wellness among Indigenous Peoples (e.g. Burgess et al., 2009; Nettleton et al., 2007; Walters et al., 2011). Studies have moved beyond simple culture as prevention models to simultaneously operationalize environmental dimensions of wellness. At the same time, critical health geographers have displaced the essentializing rural-urban dichotomies having threatened urban Indigenous identities, and detailed the multiple and diverse ways people are rooted in and relate to land (Wilson and Peters, 2005). Nonetheless, heath research continues to inadequately consider how we might locate and study the concepts of nature and practices of land-making among urban Indigenous communities.

Previous research has often conceptualized "land" and humannature relations as bounded and static, relegating wellness for Indigenous youth to rural areas, such as reserves, northern and remote territories, and ancestral homelands. The implications are that citydwelling youth can only engage with land and human-nature relations by returning to someplace elsewhere. Although we do not deny the importance of accessing rural landscapes, cultural practices on ancestral homelands, and ties with reserve communities, it is important to acknowledge that there are several barriers for city-dwelling youth in accessing land-based activities in rural areas. Our own observations working with urban Indigenous youth over the last several years noted barriers ranging from transportation, family and school obligations, program participation and volunteering, lack of ties to reserves or territories, minimal access to elders, and actively using alcohol or drugs, which typically go against land-based ceremonial protocols and participation. Thus, by centering on and highlighting the voices and perspectives of youth living within an urban Canadian context, we argue for the importance of recognizing young people's land-making practices within urban spaces to perhaps reinforce and function in concert with other land-based programs in rural areas. Furthermore, these insights demonstrate how young people re-conceptualize and decolonize the boundedness of place, identity, and nature in more porous and idiosyncratic ways. Such efforts expose the fluidity, multiplicity, and relationality of boundaries categorizing humans, land, and nature.

Amidst Canadian youth perspectives on human-nature relations, young peoples' procurement of material pleasure, physical health, human connectedness, and resources from nature are often emphasized (Woodgate and Skarlato, 2015). In contrast, our research demonstrates notions of reciprocity, spirituality, Indigenous knowledge, and sentience to characterize human-nature relations implicated during processes of land-making, resilience, and wellness. A conceptual shift away from human-centric frameworks challenges resilience and wellness

studies that circumscribe human-nature relations as instrumental or exploitive instead of reciprocal (Miller and Davidson-Hunt, 2013). Such perspectives ought to centre around Indigenous knowledges and relational models of *miyo-wicehtowin*, and beyond this on notions of *wah-kohtowin* as a spiritual foundation, natural law, and philosophy for kinship relationships with all beings (Cardinal and Hildebrandt, 2000). Thus, research examining the connections between land-making, human-nature relations, and wellness should disturb the conceptual categories between human/*other-than-human* (and also culture/nature, physicality/spirituality, context/agency, etc.) if we seriously want to challenge scientific notions of ontological difference and agency, as well as ground Indigenous worldviews through our cross-cultural or "two-eyed seeing" research collaborations (Malone, 2016).

Approaching the study of agency among other-than-human actors has a contentious history as a posthumanist philosophy in the social sciences (Latour, 2005). However, methodologies (and methods) drawn from sociology and medical anthropology have shown to be useful. While singular obtrusive methods such as interviewing may pose obvious challenges to co-create knowledge with the natural world, researchers draw from multi-method approaches. The intention of methods are not to examine intrinsic qualities of agency different actors possess, but observe processes that enact agency through various configurations of human-nature interactions and intra-actions (Malone, 2016). The ontological inclusion of other-than-human actors requires material-semiotic tools to analyze actual practices, and simultaneously, their representations and meanings (Law, 2009). Some include ethnography, praxiography, network analysis, storytelling, and arts-based methodologies (e.g. Baiocchi et al., 2013; Gad and Jensen, 2010; Mol, 2002; Richmond, 2016; Wright et al., 2012). Such methodological tools can potentially capture how complex human-nature relations are reassembled through practices of environmental repossession to shape health across space and time (Panelli, 2010). This anti-essentialist lens resists romantic representations of young people's connection to land and nature allowing us to interrogate overlapping, divergent, and nonlinear processes of agency, self-determination, and repossession. The "two-eyed seeing" framework and a modified grounded theory approach employed in this paper (Bird-Naytowhow et al., 2017; Charmaz, 2006; Kovach, 2009) was one attempt to challenge and explore such conceptual and methodological questions.

Beyond the need for a more radical ontological project within Indigenous health research, another important methodological contribution of this work involves highlighting Indigenous youth voices within inner-city contexts. In many urban situations, young people are relegated to the sidelines and excluded from meaningful contributions in the civic decisions most affecting them, including the design of city parks, spaces, and greenways. Previous work suggests that youth have a lot to gain and contribute when they are meaningfully engaged in decision making processes, including research activities (Bird-Naytowhow et al., 2017). Increasing approaches that support the engagement of youth in research is a powerful strategy to promote youth wellness by enhancing peer relationships, increasing self-confidence and capacity building, and providing opportunities to build positive relationships with adults and older mentors (Blanchet-Cohen et al., 2011; Greenwood et al., 2015). Improving youth engagement and decision making processes are also important to ensure community organizations resources and programs are relevant and meaningful to serve the needs and aspirations of young people. Based on the Indigenous youth voices and experiences outlined here, wellness and cultural identity can be strengthened by improved access to "safe" green spaces and "land" within inner-city areas, and particularly civic spaces that reflect the cultural heritage and identity of Indigenous young people.

Despite pathways examining agency among human-nature relations and youth voice in program development, research in this area has been widely criticized for theoretically placing the onus on youth to become resilient and healthy while not explicitly interrogating forms of structural disadvantage that permit marginalization and exclusion, including

barriers to access land, greenspace, and nature (Thomas et al., 2016). While this paper does not focus on critical dimensions of structural domination or violence, we highlight the voice and agency of youth-nature relations in processes of land-making to re-imagine *miyo-wicehtowin* in sustaining human-nature relations, thereby endorsing such practices and activities as important sites of inquiry in urban spaces. Future research could explore more directly how Indigenous young peoples' processes of land-making, encounters with nature, and political action towards environmental repossession can address or impact the structural mechanisms that underlie health inequities. Examples among Indigenous young people engaged in protracted struggles to protect land and water across Canada may be an empirically insightful direction (e.g. Kino-nda-niimi Collective, 2014; Willow, 2012).

#### 5. Conclusion

Indigenous health research has largely failed to examine youth engagements with land and nature in urban areas. This conceptual oversight is predicated on assumptions that land-based activities happen "out there" in rural areas and do not occur "here" in the city. Such perspectives are not reflective of contemporary decolonization processes that seek to recover and return land-based practices to urban spaces through "land-making" in all its various forms. The examples presented in this research highlight a few of these imaginative processes that promote, belonging, wellness, and thriving.

Although concepts like *miyo-wicehtowin* can, at times, anchor a collective imagination and cultural identity, Indigenous people today, and particularly the young people in urban contexts, are constantly contending with a broad array of social forces, ideologies, and relationship transformations wherein they negotiate and construct a contemporary sense of themselves out of the various local practices seen as *authentic* or *cultural* within urban contexts (Adelson, 2000). Indigenous youth cultural identity and wellness are therefore an outcome of an imaginative process constitutive of ongoing efforts toward cultural renewal, environmental repossession, and self-determination. Re-imagining *miyo-wicehtowin* as connections to the land and nature within urban contexts becomes an important part of these efforts.

With a growing interest in research, policy, and health promotion toward land-based approaches within Indigenous health contexts, our findings contribute to an expansion of definitions and methods used to re-conceptualize and re-examine land-making, human-nature relations, and health and wellness more broadly among urban Indigenous communities. Furthermore, the uptake of land-based terminology and practices in Canada - as well as globally - should not only consider urban spaces, but engage in a more radical ontological project. This project moves beyond epistemological discussions on producing knowledge about nature, and seeks to disturb social scientific and anthropocentric boundaries that locate nature as ontologically separate from the study and social activity of humans. It requires the inclusion of other-than-human actors that have the capacity and agency as much as humans to become entangled with practices of environmental repossession shaping Indigenous health and wellness. This form of living miyo-wicehtowin, complexity, and relational thinking may help health researchers avoid the dangers of romanticizing and essentializing connections to land and nature in future health research.

#### **Declaration of conflicting interests**

The authors declare no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

#### **Funding**

Funding for this project was provided by the Urban Aboriginal Knowledge Network and Social Sciences and Humanities Research Council Partnership Grant (895-2011- 1001), Canadian Institutes of Health Research (FRN 130797), Saskatchewan Prevention Institute, and the Department of Community Health and Epidemiology at the University of Saskatchewan.

#### Acknowledgments

We would like to acknowledge all the youth collaborators, CARC members, elders, and community partners who assisted with this project.

# Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.socscimed.2019.04.012.

#### References

- Adelson, N., 2000. Re-imagining aboriginality: an indigenous peoples' response to social suffering. Transcult. Psychiatr. 37 (1), 11–34.
- Adelson, N., 2005. The embodiment of inequity: health disparities in Aboriginal Canada. Can. J. Public Health S45–S61.
- Baiocchi, G., Graizbord, D., Rodríguez-Muñiz, M., 2013. Actor-Network Theory and the ethnographic imagination: an exercise in translation. Qual. Sociol. 36 (4), 323–341.
- Big-Canoe, K., Richmond, C.A., 2014. Anishinabe youth perceptions about community health: toward environmental repossession. Health Place 26, 127–135.
- Bird-Naytowhow, K., Hatala, A.R., Pearl, T., Judge, A., Sjoblom, E., 2017. Ceremonies of relationship: engaging urban indigenous youth in community-based research. Int. J. Qual. Methods 16 (1), 1–14.
- Blanchet-Cohen, N., McMillan, Z., Greenwood, M., 2011. Indigenous youth engagement in Canada's health care. Pimatisiwin 9 (1), 87–111.
- Brantlinger, P., 2003. Dark Vanishings: Discourse on the Extinction of Primitive Races, 1800-1930. Cornell University Press, New York.
- Brown, H.J., McPherson, G., Peterson, R., Newman, V., Cranmer, B., 2012. Our land, our language: connecting dispossession and health equity in an indigenous context. Can. J. Nurs. Res. 44 (2), 44–63.
- Browne, A.J., Smye, V.L., Rodney, P., Tang, S.Y., Mussell, B., O'Neil, J., 2011. Access to primary care from the perspective of Aboriginal patients at an urban emergency department. Qual. Health Res. 21 (3), 333–348.
- Burgess, C.P., Johnston, F.H., Berry, H.L., McDonnell, J., Yibarbuk, D., Gunabarra, C., ... Bailie, R.S., 2009. Healthy country, healthy people: the relationship between Indigenous health status and "caring for country. Med. J. Aust. 190 (10), 567–572.
- Cajete, G., 2000. Native Science: Natural Laws of Inter-dependence. Clear Light Publishers. Santa Fe.
- Cardinal, H., Hildebrandt, W., 2000. Treaty Elders of Saskatchewan: Our Dream Is that Our Peoples Will One Day Be Clearly Recognized as Nations. University of Calgary Press, Calgary.
- Charmaz, K., 2006. Constructing Grounded Theory: A Practical Guide through Qualitative Analysis. Sage, London.
- Clark, N., 2018. Cu7 Me7 q'wele'Wu-kt. "Come On, Let's Go Berry-Picking". Revival Of Secwepemc Wellness Approaches for Healing Child and Youth Experiences of Violence. (Doctor of Philosophy). Simon Fraser University, Burnaby.
- Clark, N., Hunt, S., 2011. Navigating the crossroads: exploring rural young women's experiences of health using an intersectional framework. In: Hankivsky, O. (Ed.), Health Inequities in Canada: Intersectional Frameworks and Practices. University of British Columbia Press, Vancouver, pp. 131–146.
- Comack, E., Deane, L., Silver, J., Morrissette, L., 2013. Indians Wear Red: Colonialism, Resistance, and Aboriginal Street Gangs. Fernwood Publishing, Winnipeg.
- De Leeuw, S., Greenwood, M., 2015. Geographies of indigenous children and youth: a critical review grounded in spaces of the colonial nation-state. In: Skelton, T., Nairn, K., Kraftl, P. (Eds.), Space, Place, and Environment. Springer, Singapore, pp. 47–69.
- DeVerteuil, G., Wilson, K., 2010. Reconciling indigenous need with the urban welfare state? Evidence of culturally-appropriate services and spaces for Aboriginals in Winnipeg, Canada. Geoforum 41 (3), 498–507 no. 3.
- Durkalec, A., Furgal, C., Skinner, M.W., Sheldon, T., 2015. Climate change influences on environment as a determinant of Indigenous health: relationships to place, sea ice, and health in an Inuit community. Soc. Sci. Med. 136, 17–26.
- Environics Institute, 2010. Urban Aboriginal Peoples Study Main Report. Retrieved from, Toronto.
- Gad, C., Jensen, C.B., 2010. On the consequences of post-ANT. Sci. Technol. Hum. Val. 35 (1), 55–80.
- Greenwood, M., De Leeuw, S., Lindsay, N.M., Reading, C. (Eds.), 2015. Determinants of Indigenous Peoples' Health. Canadian Scholars' Press, Toronto.
- Hatala, A.R., Desjardins, M., Bombay, A., 2016. Reframing narratives of Aboriginal health inequity: exploring Cree elder resilience and well-being in contexts of historical trauma. Qual. Health Res. 26 (14), 1911–1927.
- Hatala, A.R., Pearl, T., Bird-Naytowhow, K., Judge, A., Sjoblom, E., Liebenberg, L., 2017. "I have strong hopes for the future": time orientations and resilience among Canadian indigenous youth. Qual. Health Res. 27 (9), 1330–1344.
- Iwama, M., Marshall, M., Marshall, A., Bartlett, C., 2009. Two-eyed seeing and the language of healing in community-based research. Can. J. Nativ. Educ. 32 (2), 3–23.

- Iwasaki, Y., Bartlett, J.G., 2006. Culturally meaningful leisure as a way of coping with stress among aboriginal individuais with diabetes. J. Leis. Res. 38 (3), 321–338.
- Jackson, D.D., 2011. Scents of place: the dysplacement of a First Nations community in Canada. Am. Anthropol. 113 (4).
- Kidman, J., 2015. Maori young people, nationhood, and land. In: Skelton, T., Nairn, K., Kraftl, P. (Eds.), Space, Place, and Environment. Springer, Singapore, pp. 27–46.
- King, M., Smith, A., Gracey, M., 2009. Indigenous health part 2: the underlying causes of the health gap. Lancet 374 (9683), 76–85.
- Kino-nda-niimi Collective, 2014. The Winter We Danced: Voices from the Past, the Future and the Idle No More Movement. Arbeiter Ring Publishing, Winnipeg.
- Kirmayer, L.J., Sehdev, M., Whitley, R., Dandeneau, S.F., Isaac, C., 2009. Community resilience: models, metaphors and measures. Journal of Aboriginal Health 5 (1), 62–117
- Kovach, M., 2009. Indigenous Methodologies: Characteristics, Conversations, and Contexts. University of Toronto Press, Toronto.
- Kovach, M., 2010. Conversational method in Indigenous research. First Peoples Child Fam. Rev. 5, 40–48.
- Kuokkanen, R., 2007. Reshaping the University: Responsibility, Indigenous Epistemes, and the Logic of the Gift. UBC Press, Vancouver.
- Latour, B., 2005. Reassembling the Social: an Introduction to Actor-Network-Theory. Oxford University Press, Oxford.
- Lavoie, J.G., Forget, E., 2008. The cost of doing nothing: implications for the manitoba health care system. Pimatisiwin: A Journal of Aboriginal & Indigenous Community Health 6 (1).
- Lavoie, J.G., Kaufert, J., Browne, A.J., Mah, S., O'Neil, J.D., Sinclair, S., BlueSky, K., 2015. Negotiating barriers, navigating the maze: first Nation peoples' experience of medical relocation. Can. Public Adm. 58 (2), 295–314.
- Lavoie, J.G., O'Neil, J., Reading, J., Allard, Y., 2008. Community healing and aboriginal self-government. In: Belanger, Y.D. (Ed.), Aboriginal Self-Government in Canada: Current Trends and Issues. Purich Publishing, Saskatoon, pp. 173–205.
- Law, J., 2009. Actor network theory and material semiotics. In: Turner, B.S. (Ed.), The New Blackwell Companion to Social Theory. Blackwell Publishing Ltd, West Sussex, pp. 141–158.
- Malone, K., 2016. Reconsidering children's encounters with nature and place using posthumanism. Aust. J. Environ. Educ. 32 (1), 42–56.
- Miller, A.M., Davidson-Hunt, I., 2013. Agency and resilience: teachings of pikangikum first nation elders. northwestern ontario. Ecol. Soc. 18 (3).
- Mol, A., 2002. The Body Multiple: Ontology in Medical Practice. Duke University Press, Durham.
- Nettleton, C., Stephens, C., Bristow, F., Claro, S., Hart, T., McCausland, C., Mijlof, I., 2007. Utz Wachil: findings from an international study of indigenous perspectives on health and environment. EcoHealth 4 (4), 461–471.
- Panelli, R., 2010. More-than-human social geographies: posthuman and other possibilities. Prog. Hum. Geogr. 34 (1), 79–87.
- Panelli, R., Tipa, G., 2007. Placing well-being: a Maori case study of cultural and environmental specificity. EcoHealth 4 (4), 445–460.
- Peters, E.J., Andersen, C. (Eds.), 2013. Indigenous in the City: Contemporary Identities and Cultural Innovation. UBC Press, Vancouver.
- Richmond, C.A., 2016. Applying decolonizing methodologies in environment-health research: a community-based film project with Anishinabe communities. In: Fenton, N.E., Baxter, J. (Eds.), Practicing Qualitative Methods in Health Geographies. Routledge, New York, pp. 153–166.
- Richmond, C.A., Elliott, S.J., Matthews, R., Elliott, B., 2005. The political ecology of health: perceptions of environment, economy, health and well-being among 'Namgis First Nation. Health Place 11 (4), 349–365.
- Richmond, C.A., Ross, N.A., 2009. The determinants of First Nation and Inuit health: a critical population health approach. Health Place 15 (2), 403–411.
- Ritchie, S.D., Wabano, M.J., Corbiere, R.G., Restoule, B.M., Russell, K.C., Young, N.L., 2015. Connecting to the Good Life through outdoor adventure leadership experiences designed for Indigenous youth. J. Adventure Educ. Outdoor Learn. 15 (4), 350–370.
- Senese, L.C., Wilson, K., 2013. Aboriginal urbanization and rights in Canada: examining implications for health. Soc. Sci. Med. 91, 219–228.
- Siggner, A.J., Costa, R., 2005. Aboriginal Conditions in Census Metropolitan Areas, 1981-2001. Retrieved from Ottawa.
- Simpson, L., 2011. Dancing on Our Turtle's Back: Stories of Nishnaabeg Re-creation, Resurgence and a New Emergence. Arbeiter Ring Publishing, Winnipeg.
- Simpson, L., Coulthard, G., 2014. Leanne Simpson and Glen Coulthard on Dechinta Bush University, Indigenous Land-Based Education and Embodied resurgence/Interviewer: E. Ritskes. Decolonization: Indigeneity, Education & Society, Edmonton.
- Statistics Canada, 2016. Aboriginal Peoples in Canada: Key Results from the 2016 Census. Retrieved from, Ottawa.
- Stephens, C., 2015. The Indigenous Experience of Urbanization. State Of the World's Minorities and Indigenous Peoples. pp. 54–61.
- Tasker, J.P., 2017. Trudeau's 'canoes and paddles' remark called borderline racist by First Nations MP. CBC. Retrieved from. https://www.cbc.ca/news/politics/saganashletter-trudeau-canoe-paddles-1.3976685.
- Thomas, D., Mitchell, T., Arseneau, C., 2016. Re-evaluating resilience: from individual vulnerabilities to the strength of cultures and collectivities among indigenous communities. Resilience 4 (2), 116–129.
- Tobias, J.K., 2015. We Are the Land": Researching Environmental Repossession With Anishinaabe Elders. (Doctor of Philosophy). University of Western Ontario, University of Western Ontario. Retrieved from https://ir.lib.uwo.ca/cgi/viewcontent.cgi? article=4328&context=etd.
- Tuck, E., McKenzie, M., 2015. Relational validity and the "where" of inquiry: place and land in qualitative research. Qual. Inq. 21 (7), 633–638.
- Tuck, E., Yang, K.W., 2012. Decolonization is not a metaphor. Decolonization:

- indigeneity, education & society 1 (1), 1-40.
- United Nations, 2010. Urban Indigenous Peoples and Migration; A Review of Policies, Programmes and Practices Retreved from. (Nairobi).
- United Nations, 2014. World Urbanization Prospects: the 2014 Revision, Highlights. Retrieved from, New York.
- Walters, K.L., Beltran, R., Huh, D., Evans-Campbell, T., 2011. Dis-placement and dis-ease: land, place, and health among American Indians and Alaska Natives. In: Burton, L.M., Matthews, S.A., Leung, M., Kemp, S.P., Takeuchi, D.T. (Eds.), Communities, Neighborhoods, and Health. Springer, New York, pp. 163–199.
- Wexler, L.M., 2006. Inupiat youth suicide and culture loss: changing community conversations for prevention. Soc. Sci. Med. 63 (11), 2938–2948.
- Willow, A.J., 2012. Strong Hearts, Native Lands: the Cultural and Political Landscape of Anishinaabe Anti-clearcutting Activism. SUNY Press, New York.
- Wilson, K., 2003. Therapeutic landscapes and First Nations peoples: an exploration of culture, health and place. Health Place 9 (2), 83–93.
- Wilson, K., Cardwell, N., 2012. Urban aboriginal health: examining inequalities between aboriginal and non-aboriginal populations in Canada. Can. Geogr. 56 (1), 98–116.
- Wilson, K., Peters, E.J., 2005. "You can make a place for it": remapping urban First Nations spaces of identity. Environ. Plan. Soc. Space 23 (3), 395–413.
- Wilson, S., 2001. What is Indigenous research methodology? Can. J. Nativ. Educ. 25, 175–179.
- Woodgate, R.L., Skarlato, O., 2015. "It is about being outside": Canadian youth's perspectives of good health and the environment. Health Place 31, 100–110.
- Wright, S., Lloyd, K., Suchet-Pearson, S., Burarrwanga, L., Tofa, M., Country, B., 2012.
   Telling stories in, through and with Country: engaging with Indigenous and morethan-human methodologies at Bawaka, NE Australia. J. Cult. Geogr. 29 (1), 39–60.